## **ABSTRACT**

A processing method of a substrate includes: a step of forming an Si-C based film and a resist film in turn on an objective film to be etched that has been formed on a substrate; a first etching step of etching the Si-C based film making use of the resist film as a mask; and a second etching step of etching the objective film to be etched making use of the resist film and the Si-C based film as a mask. The processing method further includes a peeling-off step of peeling-off the resist film at a desired timing. The peeling-off step includes a preparing step of preparing an organic solvent as a release agent, and an applying step of applying the organic solvent to the resist film.

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